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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,065	02/09/2006	Martin Guels	101643.55963US	4756

23911 7590 09/19/2006

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EXAMINER
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SELF, SHELLEY M

ART UNIT	PAPER NUMBER
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3725

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/527,065

Applicant(s)

GUELS, MARTIN

Examiner

Shelley Self

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 2/9/06; 3/9/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the drawings are of poor quality and legibility. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the angle ( $\alpha$ ) and ( $\beta$ ) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 18. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The legal phraseology, such as the recitation, "*comprises*" should be avoided in the Abstract. Correction is required.

### ***Claim Objections***

Claim 18 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 18 changes/alters the scope of the parent claim from a knife holder to a knife for a knife holder. Accordingly, claim 18 is improper and fails to further limit the parent claim. Correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

With regard to claims 15 and 16, there are no antecedent bases for the recitations, "*the angle ( $\alpha$ )*" and "*the angle ( $\beta$ )*". Correction is required.

Regarding claim 12, the word "means" is preceded by the word(s) "fastening" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967). It is clear whether or not Applicant is invoking 35 U.S.C. 112 6<sup>th</sup> paragraph. Examiner suggests, --means for fastening—

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-18 as best as can be understood and claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shantie et al. (5,511,597) in view of Guel's (6,502,609). With regard to claims 12 and 19, Shantie discloses a knife holder for a knife tool head comprising: a base body in the form of a truncated cone or cylinder (fig. 1); and a plurality of knife holders (fig. 1) distributed around the circumference of the base body; a holder's body (28) with a mounting face for a chipping knife (42) and an adjacent mounting face for a slabbing knife (110) adjacent thereto and with an inclination and a knife mounting means (col. 3, lines 54-60) for detachable fastening of the chipper knife and the slabbing knife on their respective mounting

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faces; wherein both mounting faces have holder contact faces which are inclined with respective cross sections (fig. 3); and the knife mounting means are direct fastening means which secure the chipping knife and the slabbing knife, each having knife contact faces inclined in a corresponding shape. Shantie does not disclose the holder contact faces inclined with a V-shaped cross section or knife contact faces inclined in a V-shape corresponding to the mounting faces. It would have been obvious at the time of the invention to one having ordinary skill in the art to construct Shantie having a holder and knife contact surfaces/faces of any corresponding shape, i.e., V-shaped cross sections, because the specific selection of any shape requires only routine skill in the art and is a matter of obvious design expedients. Further the disclosure does not positively recite any criticality to the selection of V-shaped cross sections and in fact states, *"instead of V-shaped contact faces, a different type of surface contact between the holder body and the respective knife may be provided"*. In the absence of any positively recited criticality to the use/selection of a V-shaped cross sectional mounting surface/contact surface the mere selection of one shape over that of another does not in itself warrant patentability.

Moreover, the prior art, Guelts teaches knife holders used in conjunction with chipping tools and knives wherein the holding mounting contact surface has a V-shaped cross section and the knife has a corresponding V-shaped cross sectional mounting contact surface (fig. 1). Because the references are from a similar art, and deal with a similar problem, i.e., knife mounting to a tool holder for further mounting to a chipping tool head it would have been obvious at the time of the invention to one having ordinary skill in the art to construct Shantie's holder mounting surface and knife contact surface of V-shaped and corresponding V-shaped

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cross-sections so as to efficiently mount a knife to a knife holder of a chipping tool head as taught by Guels.

With regard to claim 13, Shantie discloses wherein the holder body is designed as one-piece part and means are provided for directly attaching the holder body on the knife tool head (fig. 2).

With regard to claim 14, Shantie discloses wherein the direct fastening means including a single screw connection of the slabbing knife (11) and one or two screw connections for the chipping knife (fig. 2).

With regard to claims 15 and 16, as best as can be understood, neither Shantie, nor Guels disclose the angle ( $\alpha$ ) projection of the knife is between  $130^{\circ}$  and  $230^{\circ}$  or the angle ( $\beta$ ) projection of the knife is between  $80^{\circ}$  and  $180^{\circ}$ . Where the general conditions of a claim are disclosed in the prior art, determining or discovering the optimum or workable ranges involves only routine skill in the art. Accordingly, it would have been obvious at the time of the invention to one having ordinary skill in the art to construct, Shantie having an angle ( $\alpha$ ) projection of the knife between  $130^{\circ}$  and  $230^{\circ}$  or an angle ( $\beta$ ) projection of the knife between  $80^{\circ}$  and  $180^{\circ}$ , because Applicant has failed to positively recite any criticality regarding the angle ranges between  $130^{\circ}$  and  $230^{\circ}$  or  $80^{\circ}$  and  $180^{\circ}$ , such selection would result from routine engineering practices and experimentation. See *In re Aller*, 105 USPQ 233.

With regard to claim 17, as best as can be understood, Shantie discloses wherein holder fastening means are provided laterally next to the knife mounting faces of knife holder of the knife holder for attaching the knife holder on the knife tool head (fig. 2).

With regard to claim 18, as best as can be understood, Shantie discloses a knife (42, 110) having at least one knife cutting edge on at least one longitudinal side of the knife, wherein at least one transverse side of the knife has at least one inclined contact region extending away from a knife cutting edge end, a slope of the at least one contact region being adapted such that when mounted on the knife holder as the chipping knife or as the slabbing knife, with respect to another knife attached to the holder, the two knives form a linear area contact with one another after being mounted on the holder (fig. 1, 2).

With regard to claim 20, Shantie discloses knife holders situated behind first knife holders and offset in the circumferential direction, each second knife holder holding one chipping knife (fig. 1).

Claim 21 rejected under 35 U.S.C. 103(a) as being unpatentable over Shantie et al. (5,511,597) in view of Guelts (6,502,609) as applied to claim 19 above, and further in view of Toogood (RE36, 659). Shantie does not disclose the first knife holders comprise two different types of holders. It would have been obvious at the time of the invention to one having ordinary skill in the art to construct Shantie's one-piece tool holder into two holders because constructing a formerly integral part into to separable, i.e., two parts involves only routine skill in the art. See *Nerwin v. Erlicnman*, 168 USPQ 177, 179.

Moreover, Toogood teaches in a closely related art a tool head including both chipping and slabbing knives wherein the knives are held to the tool head via a knife holder. Toogood further teaches the tool holder having two different types of holders (fig. 4). Because the references are from a similar art, it would have been obvious at the time of the invention to one



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having ordinary skill in the art to construct Shantie's one-piece tool holder into two holders so as to efficiently hold a slabbing and/or chipping knife relative to a tool head as taught by Toogood.

Claim 22 rejected under 35 U.S.C. 103(a) as being unpatentable over Shantie et al. (5,511,597) in view of Guel's (6,502,609) as applied to claim 19 above, and further in view of Robitallie (2003/0201029). Shantie does not disclose wherein the slabbing knives of two or more successive holders having chipping knives and slabbing knives arranged in offset planes.

Robitallie teaches constructing a tool such that chipping knives and slabbing knives arranged in offset planes. Robitallie teaches this construction so as to efficiently chip a workpiece. Because the references are from a similar art and deal with a similar problem, i.e., material chipping via a rotary disc tool, it would have been obvious at the time of the invention to one having ordinary skill in the art to construct Shantie such that the chipping knives and slabbing knives arranged in offset planes so as to efficiently chip a workpiece as taught by Robitallie.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shelley Self whose telephone number is 571-272-4524. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on 571-272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SSelf

September 13, 2006